

WHAT IS CLAIMED IS:

1. A stent having expanded and unexpanded configurations, said stent comprising:

first and second ring structures individually comprising an endless undulating pattern and disposed axially adjacent each other;

a first plurality of connector segments joining the first and second ring structures, each of the first plurality of connector segments having an undulating portion;

a third ring structure comprising an endless undulating pattern and disposed axially adjacent the first ring structure; and

a second plurality of connector segments joining the first and third ring structures, each of the second plurality of connector segments having an undulating portion;

wherein the undulating portion of each connector segment of the first plurality of connector segments is axially displaced from the undulating portion of a circumferentially adjacent connector segment when the stent is in said unexpanded configuration; and

wherein the undulating portion of each connector segment of the second plurality of connector segments is axially aligned with the undulating portion of a circumferentially adjacent connector segment when the stent is in said unexpanded configuration.

2. The stent of claim 1, wherein said endless undulating pattern comprises a serpentine pattern.

3. The stent of claim 1 wherein said serpentine pattern comprises a plurality of unit structures, each unit structure comprising first and second lateral arms and a central region disposed between said first and second lateral arms, said central region having a peak disposed between first and second valleys, each said unit structure being inverted with respect to adjacent unit structures of the same ring structure.

4. The stent of claim 1, wherein the undulating portion comprises a first u-shaped bend disposed between second and third u-shaped bends.

5. The stent of claim 4, wherein the first u-shaped bend extends in a first direction and the second and third u-shaped bends extend in a second direction.

6. The stent of claim 5, wherein the second direction is substantially opposite the first direction.

7. The stent of claim 1, further comprising one or more pads extending outward from said plurality of ring structures.

8. The stent of claim 7, wherein each of said one or more pads comprises an enlarged region spaced from one of said plurality of ring structures by a narrow throat region.

9. The stent of claim 7, further comprising a pharmaceutical composition disposed on said one or more pads.

10. The stent of claim 9, wherein said pharmaceutical composition comprises one or more of heparin, covalent heparin or another thrombin inhibitor, hirudin, hirulog, argatroban, D-phenylalanyl-L-poly-L-arginyl chloromethyl ketone, or another antithrombogenic agent, or mixtures thereof; urokinase, streptokinase, a tissue plasminogen activator, or another thrombolytic agent, or mixtures thereof; a fibrinolytic agent; a vasospasm inhibitor; a calcium channel blocker, a nitrate, nitric oxide, a nitric oxide promoter or another vasodilator; an antimicrobial agent or antibiotic; aspirin, ticlopidine, a glycoprotein IIb/IIIa inhibitor or another inhibitor of surface glycoprotein receptors, or another antiplatelet agent; colchicine or another antimitotic, or another microtubule inhibitor, dimethylsulfoxide (DMSO), a retinoid or another antisecretory agent; cytochalasin or another actin inhibitor; or a remodeling inhibitor; deoxyribonucleic acid, an antisense nucleotide or another agent for molecular genetic intervention; methotrexate or another

antimetabolite or antiproliferative agent; paclitaxel; tamoxifen citrate, Taxol® or derivatives thereof, or other anti-cancer chemotherapeutic agents; dexamethasone, dexamethasone sodium phosphate, dexamethasone acetate or another dexamethasone derivative, or another anti-inflammatory steroid or non-steroidal anti-inflammatory agent; cyclosporin, sirolimus, or another immunosuppressive agent; tripodal (aPDGF antagonist), angiopeptin (a growth hormone antagonist), angiogenin or other growth factors, or an anti-growth factor antibody, or another growth factor antagonist; dopamine, bromocriptine mesylate, pergolide mesylate or another dopamine agonist;  $^{60}\text{Co}$ ,  $^{192}\text{Ir}$ ,  $^{32}\text{P}$ ,  $^{111}\text{In}$ ,  $^{90}\text{Y}$ ,  $^{99\text{m}}\text{Tc}$  or another radiotherapeutic agent; iodine-containing compounds, barium-containing compounds, gold, tantalum, platinum, tungsten or another heavy metal functioning as a radiopaque agent; a peptide, a protein, an enzyme, an extracellular matrix component, a cellular component or another biologic agent; captopril, enalapril or another angiotensin converting enzyme (ACE) inhibitor; ascorbic acid, alpha tocopherol, superoxide dismutase, deferoxamine, a 21-amino steroid (lasaroid) or another free radical scavenger, iron chelator or antioxidant; a  $^{14}\text{C}$ -,  $^3\text{H}$ -,  $^{131}\text{I}$ -,  $^{32}\text{P}$ - or  $^{36}\text{S}$ -radiolabelled form or other radiolabelled form of any of the foregoing; estrogen or another sex hormone; AZT or other antipolymerases; acyclovir, famciclovir, rimantadine hydrochloride, ganciclovir sodium or other antiviral agents; 5-aminolevulinic acid, meta-tetrahydroxyphenylchlorin, hexadecafluoro zinc phthalocyanine, tetramethyl hematoporphyrin, rhodamine 123 or other photodynamic therapy agents; an IgG2 Kappa antibody against *Pseudomonas aeruginosa* exotoxin A and reactive with A431 epidermoid carcinoma cells, monoclonal antibody against the noradrenergic enzyme dopamine beta-hydroxylase conjugated to saporin or other antibody target therapy agents; enalapril or other prodrugs; and gene therapy agents.

11. A stent having expanded and unexpanded configurations said stent comprising first and second axial portions, the first axial portion comprising a first plurality of ring structures joined by axially displaced

connector segments and the second axial portion comprising a second plurality of ring structures joined by axially aligned connector segments.

12. The stent of claim 11, wherein each connector segment comprises an undulating portion comprising a first u-shaped bend disposed between second and third u-shaped bends.

13. The stent of claim 12, wherein the first u-shaped bend extends in a first direction and the second and third u-shaped bends extend in a second direction.

14. The stent of claim 13, wherein the second direction is substantially opposite the first direction.

15. The stent of claim 11, further comprising a third axial portion comprising a third plurality of ring structures interconnected by axially aligned connector segments.

16. The stent of claim 15, wherein the first axial portion is disposed axially between the second and third axial portions.

17. A stent having a first and second ends and expanded and unexpanded configurations, said stent comprising:  
a plurality of ring structures joined by a plurality of connector segments, each of the plurality of connector segments having an undulating portion;

wherein a first circumferential set of the plurality of connector segments are axially aligned and a second circumferential set of the plurality of connector segments are axially displaced.

18. The stent of claim 17, wherein a connector segment of the first circumferential set joins a ring structure forming said first end of said stent with another of the plurality of ring structures.

19. The stent of claim 17, wherein a connector segment of the second circumferential set joins first and second ring structures disposed between said first and second ends of said stent.

20. The stent of claim 17, wherein the undulating portion comprises a first u-shaped bend disposed between second and third u-shaped bends.

21. The stent of claim 20, wherein the first u-shaped bend extends in a first direction and the second and third u-shaped bends extend in a second direction.

22. The stent of claim 21, wherein the second direction is substantially opposite the first direction.